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1940 FOREST INSECT SURVEY,

ANGELES NATIONAL FOREST

For the past few years the Forest Insect Laboratory has made an annual examination of the Wrightwood - Big Pines recreational areas, and a survey report and recommendations for the 1939 season was submitted by S. T. Carlson under date of November 28, 1939.

For the current season of 1940 the Big Pines District was again covered and in addition an examination was made of the Charlton Flat - Chilao - Buckhorn areas along the new road development.

Big Pines - Swartout Valley

This examination was made November 1, 1940 by J. M. Miller. The general situation in the district was discussed with District Ranger Glen Sindel at Valyermo and a road count of infested trees was made through the timber type that could be viewed from Valyermo to Wrightwood.

The visible loss of trees in 1940 is considerably less than in 1939. For the entire strip from Pinon Ridge to Wrightwood a total of 12 fading and sorrel trees was counted from the road; this is less than half of the number counted in 1939. The 1940 loss encountered was mainly due to the pine flathead (Melanophila californica) in Jeffrey pine. Top-killing due to the pine engraver beetles is negligible this year although it was fairly prevalent in 1939.

One factor affecting the 1940 infestation in the Big Pines area was the intensive control campaign conducted by the County Forester of Los Angeles during the period from April 22 to May 23, 1940. A mimeographed report issued by the County Forester on July 5, 1940 covers the detail of this work. This shows the following work accomplished on the 747 acres of County owned land.

	Firs	Pines	Total
Trees felled and treated	63	53	116
Trees topped	44	36	80

In addition, 43 windfalls were treated and 8 wood piles inspected and barked. Apparently the campaign was directed toward eradicating all cambium feeding insects in dying or down material. During the spring period, quite a number of trees were attacked by small scolytids which feed only on the twigs and limbs and these were treated in the control program.

It was estimated that the 1940 loss for the 5 units covered last year (Pinon Ridge, Table Mountain, Lower Sheep Creek, Big Pines and Swartout Valley, would total approximately 50 trees. Estimates by individual units were not attempted because of the very low status of the infestation.

The recommendations made by S. T. Carlson in the 1939 report still apply to the present conditionsmin these areas. Maintenance control in the intensively used areas whenever infested trees appear, careful selection of trees to be treated and the use of methods that will effectively destroy the insects were the points emphasized in these recommendations.

Charlton Flat - Buckhorn

On November 6, C. E. Dunston of the Regional Office, Miller and Carlson of the Forest Insect Laboratory, and District Ranger Harlan looked over conditions in the pine areas which have been opened up by the new road as far as Buckhorn. The recommendations agreed upon were presented by Mr. Dunston in his letter of November 23 to the Forest Supervisor.

Several interesting things were observed at Charlton Flat. In this small area of old mature pine, both the western pine beetle (D. brevicomis) and the mountain pine beetle (D. monticolae) were found in a tree which was cut in the 1940 spring cleanup work. This tree, about 28" DBH, was infested at the time it was cut and the log was left in an opening so that most of the broods had been killed by solar heat. This seems to be the first record we have of the mountain pine beetle in this area. A large lightning struck ponderosa pine tree contained the only winter brood found in the area. A total of 7 Coulter and ponderosa pines killed by 1940 summer broods were counted on the road between Charlton Flat and Chilao.

Recent grading for parking areas in the Charlton Flat camp ground were found to have removed the top soil from the root systems of several ponderosa pines and these trees were already showing signs of weakening in the crown.

The high elevation conifer type represented by the conditions in the vicinity of Buckhorn contains an endemic barkbeetle infestation throughout. Between Chilao and Buckhorn recently killed trees representing the 1939 winter and 1940 summer broods were counted. These totaled 7 sugar pines and 13 Jeffrey pines. This infestation is typical of the Jeffrey pine beetle - flathead type in Jeffrey pine and the mountain pine beetle in sugar pine. White fir in this area shows some injury from Scolytus attack.

The advisability of control work in this high elevation type will depend upon developments and use of the area. At the present time it would be impracticable to treat the scattered endemic type of infestation, except for trees near the road right of way. As intensive use of these areas develops, the protection of trees for cover on camp grounds and recreational tracts will become more important and at the same time barkbeetle activity may be stimulated by disturbances resulting from improvement work. It should be feasible to handle the present insect situation as a part of the general improvement program, but periodic surveys should be continued and when necessary, action taken, to prevent a serious buildup of infestations.

Submitted by,

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Berkeley, California
December 19, 1940